

Remarks

Claims 1-27 were pending. Claims 1 – 12, 15, 19 and 22-27 have been amended without prejudice. Claims 28 and 29 were cancelled in the previous amendment and response. Hence, claims 1-27 remain pending.

Claim Rejections

The Office Action of 6/13/06 rejects claims 1 – 14 and 19 – 29 as being anticipated under 35 U.S.C. § 102(e) by *Lee* (U.S. Patent No. 7,047,561) (*Lee*). The Office action rejects claims 15 – 18 as being unpatentable over *Lee* in view of *Zisapel et al.* (U.S. Patent No. 6,718,359) (*Zisapel*) here. Applicant respectfully traverses these rejections. Applicant has amended independent claims 1, 19, and 22 in order to more clearly state the invention and to expedite prosecution. Prior to discussing each of the claim rejections in detail, a brief overview of *Lee*, *Zisapel* and the present Application are provided.

Lee discloses a firewall which is optimized for use with real-time Internet applications such as voice, fax, video or multimedia. *Lee*, col. 2, ll. 21 – 23. *Lee*'s firewall is referred to as a "hybrid" firewall, apparently because it includes an application proxy operating at the application layer (layer 7) and a packet filter operating at the network layer (layer 3) and the transport layer (layer 4). *Id.* at ll. 23 – 27. The hybrid firewall is placed between internal IP network 110 and external IP network 120, thereby protecting the internal IP network 110 from attack from the outside. *Id.* at col. 4, ll. 16 – 19. To protect the internal IP network 110 from attack, the hybrid firewall implements an application proxy 102, packet filter 106, and network address translation (NAT) 108. *Id.* at ll. 27 – 30. Importantly, the hybrid firewall 100 restricts access to/from the internal IP network 110 to one **centralized point** where all incoming and outgoing traffic is examined against one or more security policies. *Id.* at ll. 23 – 26 (emphasis added). As such, to ensure the protective functionality of *Lee*'s hybrid firewall, only one hybrid firewall exists through which all traffic passes between internal network and external network.

In contrast to *Lee*, *Zisapel* describes a load balancing system in which load balancers in respective server farms choose a server from multiple servers to handle FTP or HTTP requests from a client. *Zisapel*, col. 5, ll. 23 – 30; col. 6, ll. 8 – 9; col. 6, ll. 34 – 36. Client requests are typically routed to a server farm that has the best network proximity. *Id.* at col. 7, ll. 38 – 44. The load balancer to which the request is directed sends the corresponding response to the client

after the request has been serviced by one of the servers in the farm. *Id.* at col. 6, ll. 8 – 10. Although the server farm having the best network proximity may be determined, a load balancer may nevertheless decide to forward an incoming request to a location that does not have the best network proximity if a load report received from the best location indicates that the location is too busy. *Id.* at col. 7, ll. 43 – 49. Importantly, *Zisapel* relates exclusively to request/response protocols such as FTP and HTTP, and does not address issues that arise in relation to real-time protocols, such as RTP.

In contrast to both *Lee* and *Zisapel*, the present application relates to selecting a call signaling and media proxy in a Voice over Internet Protocol (VoIP) network and routing media packets in a VoIP call through the selected call signaling and media proxy and through a determined network element. In this way, the quality of a VoIP call is insured by controlling the path of the media stream to ensure that these voice packets traverse a known, and presumably managed, IP network. *Application*, [0014]. The present application relates to communication protocols that include a signaling portion for setting up a call and a media portion for exchanging media associated with the call for the duration of the call.

Now turning to the specific rejections, as discussed above, independent claims 1, 19, and 22 have been amended to include “selecting a call signaling and media proxy in a VoIP network through which to route media packets associated with the VoIP call” or some variation thereof. *Lee* neither teaches nor suggests such a limitation.

Lee discloses a hybrid firewall 100 that restricts access to/from the internal IP network 110 to **one centralized point** where *all* incoming and outgoing traffic is examined against one or more security policies. *Lee* at col. 4, ll. 23 – 26 (emphasis added). To emphasize this principle of a single point of traffic examination for security, *Lee* depicts a **single** hybrid firewall in Fig. 1. Applicant has thoroughly reviewed *Lee* and cannot find any teaching or reasonable suggestion to include more than one hybrid firewall in *Lee*’s system. Indeed, *Lee* teaches away from such an arrangement in order to ensure security. In addition, the Office recognizes that *Lee* fails to teach “selecting call signaling and media proxy servers that provide a predetermined quality of service.” *Office action*, p. 3.

Therefore, there can be no selecting of a hybrid firewall in *Lee*, because there is only one hybrid firewall provided. As such, *Lee* neither teaches nor suggests all the claim limitations of any of independent claims 1, 19, and 22, as they are amended.

As mentioned, the Office states that Lee fails to teach “selecting call signaling and media proxy servers that provide a predetermined quality of service” in its rejection of claim 15. The Office relies on *Zisapel* for a teaching of this limitation. Applicant asserts that *Zisapel* fails to teach or suggest the foregoing limitation or the similar elements added to independent claims 1, 19, and 22.

Claim 1 was amended to include “selecting a call signaling and media proxy in a VoIP network through which to route media packets associated with the VoIP call”. Claims 19 and 22 were amended to include similar elements. As such, the independent claims relate to routing of media in a VoIP call in a VoIP network. Such media includes real-time data, such as that included in Real Time Transport Protocol (RTTP, or RTP). In a VoIP call, it is understood that both the originating endpoint and the destination endpoint act as servers of media during the call, i.e., media is bi-directional. A call signaling and media proxy is selected to route media packets that may come from a destination VoIP endpoint and/or an originating VoIP endpoint.

As discussed herein, *Zisapel* relates to server load balancing in response/request protocol (e.g., FTP and HTTP) environments. *Zisapel*'s load balancers select servers to service requests from clients. The server satisfies the request by sending a response back to the requesting client. As such, in *Zisapel*, call signaling is not relevant. *Zisapel* does not contemplate a call signaling and media proxy because when FTP and HTTP are used, call signaling to set up a call, and separate media streaming are not relevant. Therefore, *Zisapel* fails to teach or reasonably suggest selecting a call signaling and media proxy in a VoIP network through which to route media packets associated with the VoIP call.

Accordingly, for at least these reasons, independent claims 1, 19, and 22 are believed to be allowable. Claims 2 – 18 each depend from claim 1 in some form and are therefore believed to be allowable for at least the same reasons as claim 1. Claims 20 – 21 each depend from claim 19 and are therefore believed to be allowable for at least the same reasons as claim 19. Claims 23-27 each depend from claim 22 and are therefore believed to be allowable for at least the same reasons as claim 22.

No Motivation to Combine Lee and Zisapel

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or

motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *MPEP* § 2143.01. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is ***no suggestion or motivation*** to make the proposed modification. *Id.* (emphasis added). If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are ***not sufficient*** to render the claims *prima facie* obvious. *Id.* (emphasis added).

In the present case, the Office asserts that one of skill in the art would have been motivated to modify *Lee* with the teachings of *Zisapel* in order to carry out selecting a call signaling and media proxy server. *Office action*, p. 3. Applicant traverses this assertion. As discussed below, to modify *Lee* with the teachings of *Zisapel* would render *Lee*'s invention unsatisfactory for its intended purpose and would change the principal of operation of *Lee*.

As discussed above, *Lee*'s hybrid firewall 100 restricts access to/from the internal IP network 110 to ***one centralized point*** where ***all*** incoming and outgoing traffic is examined against one or more security policies. *Lee* at col. 4, ll. 23 -- 26 (emphasis added). *Zisapel*'s system provides for selecting a server among multiple servers for load balancing. *Zisapel*, Fig. 1A. To combine *Zisapel* would be to change *Lee* to have multiple hybrid firewalls, and choose from those firewalls when communicating between *Lee*'s internal and external networks. However, this would change *Lee*'s fundamental principle that ***all incoming and outgoing traffic go through one centralized point*** where it is examined against security policies. With such a change, some of the traffic would go through one hybrid firewall, while other traffic goes through another hybrid firewall in a decentralized fashion.

In addition, because *Lee*'s system's security is achieved primarily because there is only one hybrid firewall, to include multiple hybrid firewalls from which to select would render *Lee*'s invention unsatisfactory for its intended purpose. To change *Lee* in such a way would remove a key aspect of security: ***one centralized point*** of traffic communication into and out of the internal network. As such, a primary security aspect of *Lee* would be greatly impaired by a combination of *Zisapel* and *Lee*.

Furthermore, the nature of the problem to be solved is an important factor in determining a motivation to combine references. *MPEP* § 2143.01. Looking at the nature of the problems

solved by *Lee* and *Zisapel*, it is clear that they are very different. *Zisapel* is entitled “Load Balancing” and attempts to solve problems related to routing HTTP and FTP requests using conventional load balancing techniques. *Zisapel*, col. 1, ll. 47 – 67; col. 2, ll. 1 – 15. By contrast, *Lee* attempts to solve problems related to network security and delays in transmission of real-time Internet communications, due in part to NAT in the in the network channel. *Lee*, col. 2, ll. 3 – 5, 64 – 67; col. 3, ll. 1 – 5.

Therefore, there is no motivation to combine *Lee* and *Zisapel* for at least the above reasons. As such, a prima facie case of obviousness with respect to selecting a call signaling and media proxy cannot be supported with an asserted combination of *Lee* and *Zisapel*. Applicant therefore requests allowance of the claims.

Claim Amendments

The claim amendments do not add any new subject matter. Support for the amendments to claims 1, 3 – 12, 15, 19 and 22 can be found in the specification at [0024], [0031] – [0033]. Support for amendments to claim 2 can be found in the specification at [0035].

Conclusion

In view of the foregoing, Applicants submit that all claims now pending in this Application are in condition for allowance, and Applicant respectfully requests withdrawal of the rejections and allowance of the claims.

If the Examiner believes a telephone conference would aid in the prosecution of this case in any way, please call the undersigned at 303-447-7739.

Dated: November 13, 2006

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Damon A. Rieth', written over a horizontal line.

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